



# **Certificate of Analysis**

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Product Name: Tasimelteon Catalog No.: 7493 Batch No.: 1

CAS Number: 609799-22-6

IUPAC Name: N-[[(1R,2R)-2-(2,3-Dihydro-4-benzofuranyl)cyclopropyl]methyl]propanamide

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{19}NO_2$ Batch Molecular Weight:245.32Physical Appearance:White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 99.8% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

**Optical Rotation:**  $[\alpha]_D = -42.2$  (Concentration = 1, Solvent = Chloroform)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 73.44 7.81 5.71 Found 73.87 7.81 5.73

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

Print Date: Aug 1st 2022

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#### **Description:**

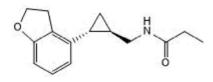
Tasimelteon is a high affinity and selective dual melatonin receptor (MT $_1/\text{MT}_2$ ) agonist (K $_i$  values are 0.304 nM and 0.0692 nM, respectively). It has no significant interaction with any other commonly screened receptors or enzyme binding sites. Tasimelteon induces a potent, concentration-dependent inhibition of forskolin-stimulated cAMP accumulation in NIH-3T3 cells stably expressing human MT $_1$  (EC $_{50}$  = 0.74 nM) or expressing human MT $_2$  (EC $_{50}$  = 0.1 nM) receptors. Tasimelteon is a circadian regulator.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>15</sub>H<sub>19</sub>NO<sub>2</sub> Batch Molecular Weight: 245.32 Physical Appearance: White solid

**Minimum Purity**: ≥98%

#### **Batch Molecular Structure:**



Storage: Store at -20°C

## Solubility & Usage Info:

DMSO to 100 mM ethanol to 100 mM

### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Lavedan** *et al* (2015) Tasimelteon: a selective and unique receptor binding profile. Neuropharmacology *91* 142. PMID: 25534555. **Vachharajani** *et al* (2003) Preclinical pharmacokinetics and metabolism of BMS-214778, a novel melatonin receptor agonist. J.Pharm.Sci. *92* 760. PMID: 12661062.

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